IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.   09/383,688
Filing Date   08/26/99
Applicant   Alexander L. Cheng
For   METHOD AND APPARATUS FOR POSITION TRACKING AND
                  COMMUNICATION WITHIN A DEFINED LOCALE
Group Art Unit   2683
Examiner   Sheila Smith

AMENDMENT "A"

Commissioner of Patents and Trademarks
Washington, DC 20231

Sir/Madam:

In response to Office Action by Examiner Smith dated 10/01/01 regarding the
aforementioned patent application, please amend the application as follows:

IN THE ABSTRACT

A method and apparatus is disclosed for position tracking and communication within a
defined locale.   Low power transmitters and receivers, called probes, are placed in key
locations throughout the locale with non-overlapping coverage areas, called ranges.   The
persons or objects to be tracked carry a battery-powered device, called a tag.   The battery
in the tag can be used to limit the tag's life-span (useful for applications such as limited
time span, system renewal according to expected turnover rate, etc.), thereby allowing
reuse of the ID.   The tag is encoded with a two-level ID code with the common part used
in communication with probe in normal condition.   The tags respond to beacon upon
entering a probe's range.   The response is gathered by a probe and fed to a central
computer where the tag's current position is recorded and combined with site-specific
information and past history to determine the most likely position of each tag.   Since the
tags do not need to perform any complex computation or high-power communication, they
can be constructed inexpensively and deployed as a disposable device.   The whereabouts
and past information can be queried at various reporting locations.   There can also be
public announcement, such as speaker or display, placed throughout the locale.   The tag
can be equipped with some alert or display capability for communication.   The present
invention provides a low cost, highly usable position tracking system.   The system is able
to function even with radio signal deafening structure, and provides a site-specific